



INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

## **A COMPARATIVE STUDY ON THE CLINICAL EFFICACY OF TUBERCULIN PURIFIED PROTEIN DERIVATIVE AND VITAMIN D3 IN THE INTRALESIONAL IMMUNOTHERAPY OF RECURRENT AND RECALCITRANT CUTANEOUS WARTS**

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**Background:** Cutaneous warts are benign epidermal proliferations caused by Human Papilloma Virus. A number of immunotherapeutic agents have been tried with variable results. Recently, lot of interest has been generated in studying the immunomodulatory role of Tuberculin Purified Protein Derivative (PPD) and vitamin D3 in the treatment of recurrent and recalcitrant warts.

**Objective:** To compare the clinical efficacy of intralesional Tuberculin PPD & vitamin D3 in the immunotherapy of warts.

**Materials and Methods:** Randomized, single-blind study was conducted on 60 adult male and female patients, divided into two groups. The patients were given either 0.2 ml of injectable Vitamin D3 (120,000IU) or 0.2 ml of Tuberculin PPD (10 TU) intralesionally at 2-weekly intervals for a total of four sessions. The patients were followed up every 2 weeks for a period of 6 months and assessed for their response to therapy regarding the number of warts, their regression and recurrence.

**Results:** Complete regression with restoration of normal skin margins was noted in 24 out of 30 patients (80%) in the Tuberculin PPD group and in 26 out of 30 (87%) in the Vitamin D3 group. The reduction in the number of lesions was statistically significant in both the groups ( $p < 0.05$ ) at the second follow up. The reduction was highly significant ( $p < 0.001$ ) in the vitamin D3 group compared to the Tuberculin PPD group. No recurrence or any adverse effects were observed in both the groups.

**Conclusion:** This study shows that both Tuberculin PPD and vitamin D3 are effective therapeutic options for treatment of recurrent and recalcitrant cutaneous warts in patients in whom other modes of conventional therapy had failed. In view of their safety and efficacy, it is suggested that both these modalities may be considered as the first line of therapy for all





types of cutaneous warts.

